

## **Orthopaedic Connection**

### **Bisphosphonates. Huh?**

By Thomas J. Haverbush, M.D.  
Orthopaedic Surgeon

*Transforming patient information into patient understanding.*

#### **Jeopardy**

A class of very popular bone building drugs.

What is \_\_\_\_\_ Bisphosphonate?

I chose to start with a “Jeopardy” like entry because powerful bone building medication can put some patients in jeopardy.

#### **Bones Are Dynamic**

Unfortunately, there is no cure for osteoporosis. It is here to stay. Fortunately though it is treatable and to some extent preventable. Bone is a living tissue that changes constantly. Bone is being removed and replaced throughout life. After menopause bone is removed much faster than before, leading to osteoporosis.

The bisphosphonate class of medications greatly slows the breakdown of bone. They do this by extremely complex biochemical pathways as you might imagine.

The medications are usually combined with Vitamin D, Calcium and weight bearing exercise to effectively treat osteoporosis.

#### **2011**

In 2011 the Food and Drug Administration (FDA) published information about side effects in women taking Bisphosphonates. The names of these drugs are Fosamax (alendronate), Actonel (risedronate), Reclast (zoledronic acid) and Boniva (ibandronate).

The FDA stated that a very small percentage of women taking the drugs for years had possible side effects.

- Fracture of the upper end of the femur
- Esophageal cancer
- Necrosis of the jaw bone

I have personally operated on one woman who had such a fracture of the femur. She had taken a bisphosphonate for years. The two other side effect conditions I don't see in my practice.

By 2012 at least 21% (and probably more) women had stopped taking bisphosphonates.

#### **What To Do?**

Bone density tests are reported as a T-score. If a person's T-score is lower than -2.5, the person definitely has osteoporosis.

The person with a T-score of -2.5 or below is at risk for a major osteoporotic fracture of the hip, spine, wrist, etc.

*That risk is tremendously higher for a fracture than the risk of a side effect from bisphosphonates.*

In other works patients at risk for osteoporotic fractures should not be discouraged from starting or continuing these medications, because the medications greatly reduce the incidence of fractures. *The benefit of taking bisphosphonates highly outweighs the risk of a side effect.*

#### **Who Is At Risk For An Osteoporotic Fracture?**

- You have a T-score of -2.5 or lower
- You have had a fracture already
- Your bone mass decreased on recent test compared with previous test
- You smoke and have a lower bone density
- You take steroids

Your doctor should certainly strongly consider starting you on a bisphosphonate.

#### **Experts Recommend This**

If a person has a mild risk of fracture and has taken a bisphosphonate more than five years, their doctor should consider taking them off the drug for at least one year. Perhaps longer in certain cases. After this “vacation” the bisphosphonate can be started again.

Patients at higher risk of fractures should be treated for up to 8 – 10 years with a bisphosphonate before going off the medication for 1 -2 years.

#### **Bottom Line**

Please don't try to figure this out yourself. It's too complicated. Your doctor will know what is best for you. It will be based on your T-score, your individual risk factors, lab tests such as bone turnover markers and possibly other personal history.

*Our goal is quality, highest standards and best outcomes.*

#### **Office Website and Gratiot County Herald Archive**

What if there was a whole world of musculoskeletal information at one place? There is! [www.orthopodsurgeon.com](http://www.orthopodsurgeon.com) opens up for you the office website, Your Orthopaedic Connection and the Archive of all previous GCH articles I have written for you, your family and friends.

Please check it out. Do yourself a favor.

Be well.

Dr. Haverbush